

ABSTRACT

An *in vitro* method to conduct genomic replication of the viral genomes of viruses that utilize RNA-dependent RNA polymerase for replication (RDRP viruses), such as HCV. The method employs a construct comprising the 3' and 5' untranslated regions (UTRs) of the viral genome which are operably linked on the 5' and 3' ends of a reporter sequence, in antisense orientation, such that when viral replication is occurring within the cell which produces RDRP, the reporter protein will be made. The method of the invention provides an efficient means for measuring genomic replication in RDRP viruses, and also for the rapid screening of compounds for their ability to inhibit genomic replication of RDRP viruses, including the Hepatitis C virus (HCV).